

WHAT IS CLAIMED IS:

1. An information processing system in which a plurality of information processing apparatuses are connected through a network, at least one of the plurality of information processing apparatuses comprising:

first adding means for adding first additional information to input information by a first adding method; and

second adding means for adding second additional information to the input information by a second adding method,

wherein the first adding method has a higher robustness than the second adding method.

2. An information processing system according to Claim 1, further comprising communication means for communicating among the plurality of information processing apparatuses when said first adding means and said second adding means are provided for different information processing apparatuses.

3. An information processing system according to Claim 1, wherein the first additional information can be used for identifying the second adding method.

006250-2282550

4. An information processing system according to Claim 1, wherein the first additional information can be used for identifying each information processing apparatus on the network.

5. An information processing system according to Claim 1, wherein the second adding method is different from the first adding method.

6. An information processing system according to Claim 1, wherein the second additional information is unlikely to reduce the quality of the input information or is information which people are unlikely to perceive.

7. An information processing system according to Claim 1, wherein the second additional information is larger in amount than the first additional information.

8. An information processing system according to Claim 1, wherein the second adding method is the same as the first adding method.

9. An information processing system according to Claim 1, wherein the first adding method uses confidential

information common to the plurality of information processing apparatuses.

Sub A
10. An information processing system according to Claim 9, wherein the confidential information is the position of the first additional information or the amount of change against the first additional information.

11. An information processing system according to Claim 1, wherein the information processing apparatus further comprises first and second extracting means for extracting the first and second additional information, respectively, from the input information to which the first and second additional information has been added.

Sub A3
12. An information processing system according to Claim 11, wherein, before additional information is added to the input information by the use of said first or second adding means, whether additional information has been added to the input information is checked by the use of the first or second extracting means corresponding to the first or second adding means.

13. An information processing system in which a plurality of information processing apparatuses are

connected through a network, at least one of the plurality of information processing apparatuses comprising:

first extracting means for extracting first additional information from input information by a first extracting method; and

second extracting means for extracting second additional information from the input information by a second extracting method identified by the extracted first additional information.

0062281
SUB 1
14. An information processing system according to Claim 13, further comprising communication means for communicating among the plurality of information processing apparatuses when said first adding means and said second adding means are provided for different information processing apparatuses.

Sub 4
15. An information processing system according to Claim 13, wherein the information processing apparatus further comprises determination means for determining that an attack has been made to the input information when only the first or the second additional information is extracted, and that the input information has no additional information when neither the first nor the second additional information is extracted.

16. An information processing apparatus comprising:
first adding means for adding first additional
information to input information at a high robustness by a
first adding method; and
second adding means for adding second additional
information to the input information by a second adding
method.

17. An information processing apparatus according to
Claim 16, wherein the first additional information can be
used for identifying the second adding method.

18. An information processing apparatus according to
Claim 16, wherein the first additional information can be
used for identifying each information processing apparatus
on the network.

19. An information processing apparatus according to
Claim 16, wherein the second adding method is different from
the first adding method.

20. An information processing apparatus according to
Claim 16, wherein the second additional information is
unlikely to reduce the quality of the input information or

4
006350-032900

Sub
a5

Q5
Q574
is information which people are unlikely to perceive.

21. An information processing apparatus according to Claim 16, wherein the second additional information is larger in amount than the first additional information.

22. An information processing apparatus according to Claim 16, wherein the second adding method is the same as the first adding method.

23. An information processing apparatus according to Claim 16, wherein the first adding method uses confidential information common to the plurality of information processing apparatuses on the network.

24. An information processing apparatus according to Claim 23, wherein the confidential information is the position of the first additional information or the amount of change against the first additional information.

25. An information processing apparatus according to Claim 16, further comprising first and second extracting means for extracting the first and second additional information, respectively, from the input information to which the first and second additional information has been

added.

26. An information processing apparatus according to Claim 25, wherein, before additional information is added to the input information by the use of said first or second adding means, whether additional information has been added to the input information is checked by the use of the first or second extracting means corresponding to the first or second adding means.

27. An information processing apparatus comprising:
first extracting means for extracting first additional information from input information by a first extracting method; and

second extracting means for extracting second additional information from the input information by a second extracting method identified by the extracted first additional information.

28. An information processing apparatus according to Claim 27, further comprising determination means for determining that an attack has been made to the input information when only the first or the second additional information is extracted, and that the input information has no additional information when neither the first nor the

POLYMER LETTERS

first adding step of adding first additional

a second adding step of adding second additional

30. An information processing method comprising:

a second extracting step of extracting second

31. An information processing method according to

ining t
ation w

32. A computer-readable recording medium for storing a program, the program comprising:

a first adding step of adding first additional information to input information at a high robustness; and
a second adding step of adding second additional information to the input information.

33. A computer-readable recording medium for storing a program, the program comprising:

a first extracting step of extracting first additional information from input information;
an identifying step of identifying an extracting method by the extracted first additional information; and
a second extracting step of extracting second additional information from the input information by the identified extracting method.

29
ant

006250" 2282556
032900